

ASLANOVA, I.F.

Role of the corpus callosum in the formation of complex defense reflexes. Zhur. vys. nerv. deiat. 15 no.2:357-363 Mr-Apr '65.

1. Institut vysshay nervnoy deyatel'nosti i neyrofiziologii AN
SSSR, Moskva. (MIRA 18:5)

ASLANOVA, K., aspirant

Prophylaxis of eye injuries at the Andizhan "Kommunar"
Plant. Med. zhur. Uzb. no.7:27-29 JI '63.

(MIRA 17:2)

1. Iz kafedry glaznykh bolezney (zav. - dotsent M.K.
Kamilov) Tashkentskogo instituta usovershenstvovaniya vrachey.

CA

15-011275, 101A

27

Demulsification and deoiling of Embe crude oils.
M. A. Aslanova. *Vostochnaya Neft* 1960, No. 3-4, 54.
04.—Demulsification and deoiling (known) methods
used in the Embe oil fields are discussed. Various mea-
sures for the improvement of the efficiency are given.
A. A. Bochtlingh.

ASS-11 A METALLURGICAL LITERATURE CLASSIFICATION

GROUP 02	SECTION 01	SECTION 02	SECTION 03	SECTION 04	SECTION 05	SECTION 06	SECTION 07	SECTION 08	SECTION 09	SECTION 10	SECTION 11	SECTION 12	SECTION 13	SECTION 14	SECTION 15	SECTION 16	SECTION 17	SECTION 18	SECTION 19	SECTION 20	SECTION 21	SECTION 22	SECTION 23	SECTION 24	SECTION 25	SECTION 26	SECTION 27	SECTION 28	SECTION 29	SECTION 30	SECTION 31	SECTION 32	SECTION 33	SECTION 34	SECTION 35	SECTION 36	SECTION 37	SECTION 38	SECTION 39	SECTION 40	SECTION 41	SECTION 42	SECTION 43	SECTION 44	SECTION 45	SECTION 46	SECTION 47	SECTION 48	SECTION 49	SECTION 50	SECTION 51	SECTION 52	SECTION 53	SECTION 54	SECTION 55	SECTION 56	SECTION 57	SECTION 58	SECTION 59	SECTION 60	SECTION 61	SECTION 62	SECTION 63	SECTION 64	SECTION 65	SECTION 66	SECTION 67	SECTION 68	SECTION 69	SECTION 70	SECTION 71	SECTION 72	SECTION 73	SECTION 74	SECTION 75	SECTION 76	SECTION 77	SECTION 78	SECTION 79	SECTION 80	SECTION 81	SECTION 82	SECTION 83	SECTION 84	SECTION 85	SECTION 86	SECTION 87	SECTION 88	SECTION 89	SECTION 90	SECTION 91	SECTION 92	SECTION 93	SECTION 94	SECTION 95	SECTION 96	SECTION 97	SECTION 98	SECTION 99	SECTION 100
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ASLANOVA, M. A.

Technology of oil and natural gas; approved textbooks for technicians of the petroleum industry.
Baku, Azneftizdat, 1947. 391 p. (49-15783)

TN690.A8

ACS

5

Fiber, Thread, and Fabrics from Glass. M. ANLASONA. Warsaw, 1950. 89 pp., 34 figures. Translated from Russian. Reviewed in *Saklo i Ceram*, 2 [10] 240 (1951). Physical and technical properties of glass fibers, thread, and fabrics and the results of investigations are given. A D I

Aslanova, M.

USSR /Chemical Technology. Chemical Products
and Their Application

I-12

Silicates. Glass. Ceramics. Binders.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31511

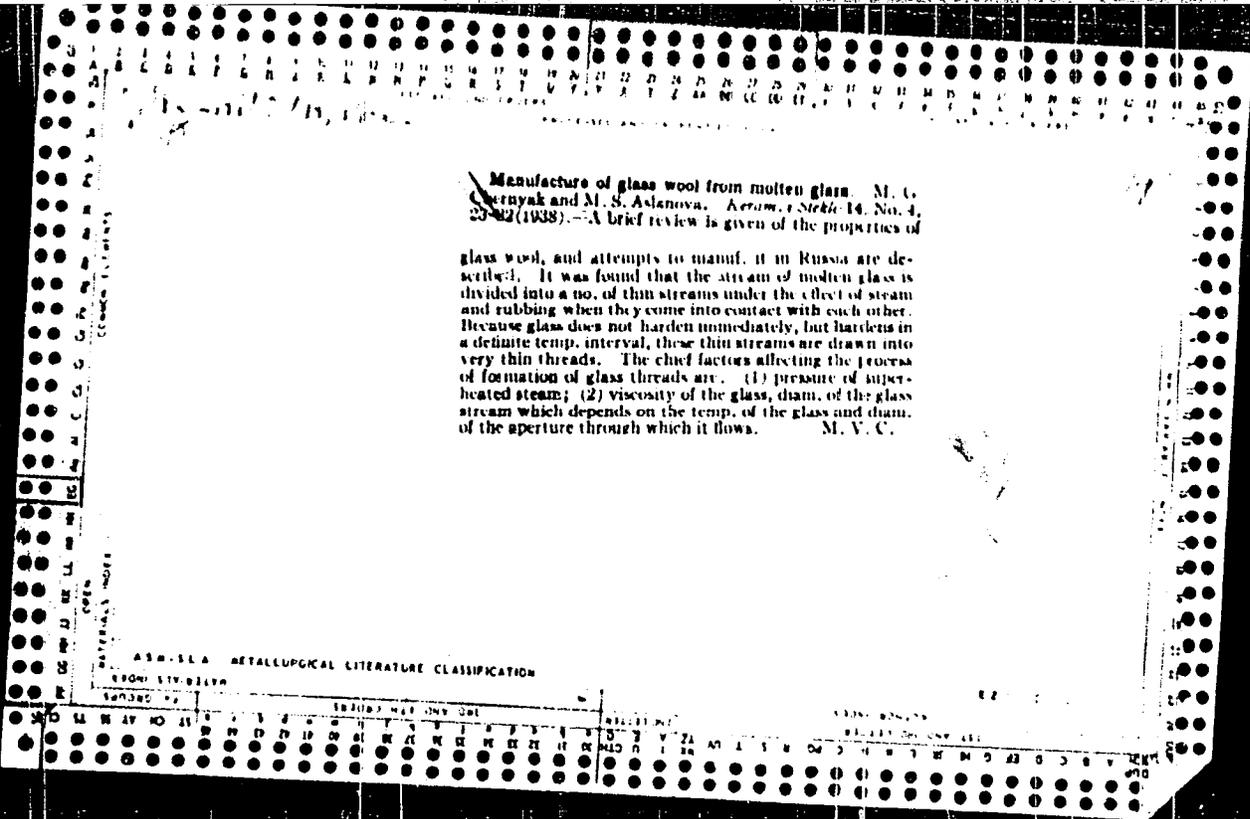
Author : Aslanova M.

Title : Fourth International Congress on Glass

Orig Pub: Legkaya prom-st', 1956, No 11, 51-52

Abstract: No abstract.

Card 1/1



ASLANOVA, Margarita Semenovna.

All-Union Sci Res Inst of Glass Fibre. Academic degree of Doctor of Chemical Sciences, based on her defense, 30 December 1954, in the Council of the Inst of Physical Chemistry, the Acad Sci USSR, of her dissertation entitled: "Physico-Chemical Phases of the Mechanical, Electrical and Adhesive Properties of Glass Fibres."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 10, 30 Apr 55, Byulleten' MVO SSSR, No. 15, Aug 56, Moscow, pp. 5-24, Uncl. JPRS/NY-537

ASLANOVA, M.S., laureat Stalinskoy premii, kandidat tekhnicheskikh nauk.

Achievements of Soviet scientists. Leg.prom. 7' no.11:27-28 B '47.

(MLRA 6:11)

(Research, Industrial)

ASLANOVA, M. S.

Chernyak, M. G. and Aslanova, M. S. - "The experience gained in obtaining stained fiber and colored fabric from glass," In the symposium: Fiz.-tekh. svoystva i primeneniye steklovoloknistykh materialov, Moscow-Leningrad, 1949, p. 117-23

SO: U-1355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

ASLANOVA, M. S.

Aslanova, M. S. and Edel'shteyn, S. Z. - "Physico-engineering properties of glass fibers," In the symposium: Fiz.-tekhn. svoystva i primeneniye steklovoloknistykh materialov, Moscow-Leningrad, 1949, p. 71-101

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

ASLANOVA, M. S.

Aslanova, M. S. - "Electrical properties of the glass fibers of certain glass compositions," In the Symposium: Fiz.-tekhn. svoystva i primeneniye steklovoloknistykh materialov, Moscow-Leningrad, 1949, p. 61-71

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

ASLANOVA, M. S.

USSR/Physical Chemistry

Card 1/1

Author : Aslanova, M. S.

Title : Effect of an adsorptively active medium on the durability of glass filaments.

Periodical : Dokl AN SSSR, 95, 6, 1215 - 1218, 21 Apr 1954.

Abstract : Durability of glass filaments is greatly decreased by the physico-chemical process of adsorption. The article gives a description of a durability test of various chemical compound-glass filaments in various media [air of different humidity, non-polar kerosene, water, and aqueous solutions of surface-active substances (potassium oleate, aerosol DT)]. There are a table and diagrams in the article.

Institution : All Union Research Scientific Institute of glass filaments, Institute of Phys. Chem. of the Acad. of Scs. of the USSR.

Submitted : 18 Feb 1954

ASLANOVA, M. S.
USSR/Physical Chemistry

Card 1/1

Authors : Aslanova, M. S., and Rebinder, P. A. Academician

Title : Adsorption effects of elastic fatigue and creep in glass fibers

Periodical : Dokl. AN SSSR, 96, Ed. 2, 299 - 302, May 1954

Abstract : Investigations show that chemical reactions are not obligatory in processes leading to deformation and mechanical disruption of glass fibers. The greatest adsorption effects of elastic fatigue and creep were noticed during the addition to the water of alcohols and velon (vinylidene chloride) which are chemically inert with regard to glass. The adsorption effect increases as the stress during deformation approaches the limit of technical strength of glass fibers. At uniform stress the adsorption effect of elastic fatigue is greater in the case of thicker fibers. Fifteen references; 5 USSR since 1941; 1 German since 1863. Graphs.

Institution : Acad. of Sc. USSR, Institute of Phys. Chem. and All-Union Scientific-Research Institute of Glass Fiber.

Submitted : February 18, 1954

ASLANOVA, M.S., doktor khimicheskikh nauk (Moskva)

Glass fiber. Priroda 45 no.4:85-89 Ap '56. (MIRA 9:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut steklovolokna.
(Glass fibers)

ASLANOVA, M.S., doktor khim. nauk.

Glass fibers and materials made from them. Khim. nauka 1 prom. 3
no.1:72-76 '58.

(Glass fibers)

(MIRA 11:3)

ASLANOVA, M.S.

AUTHOR: Yaroshevich, V.M., Engineer

110-58-6-22/22

TITLE: A Conference on New Electrical Insulating Materials and Technological Processes (Konferentsiya po osvoyeniyu novykh elektroizolyatsionnykh materialov i tekhnologicheskikh protsessov)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, Nr 6, pp 77 - 80 (USSR).

ABSTRACT: A conference on new insulating materials and technological processes was held in Leningrad in December, 1957. Called by the Nauchno-tekhnicheskoye obshchestvo energeticheskoy promyshlennosti, it was attended by representatives of almost all the electrical manufacturing works of the USSR and of research institutes and other organisations, altogether 270 persons.

The first report was by Doctor of Chemical Sciences M.S. Aslanova and Engineer B.S. L'vov of the VNIIT SteklovoLokna (Scientific Research Institute for Glass Fibre), who discussed the manufacture and general position of glass-fibre insulation. The conference considered that production of this material is inadequate.

The introduction of silicone insulation was discussed in detail and Candidates of Technical Sciences V.I. Kalitvyanskiy and

Card1/4

A Conference on New Electrical Insulating Materials and Technological Processes 110-88-6-22/22

K.I. Zabirina reported on "Silicone Materials for the Insulation of Electrical Machines". Engineer Ye.P. Bogdanova spoke on "Experience in Mastering the Use of Silicone Insulation in the Elektrosila Works" and Engineer B.N. Tompov made a similar report for the Dinamo Works. The present state of silicone insulation is then reviewed. Candidate of Technical Sciences A.V. Khval'kovskiy reported on "High-voltage Insulation of Electrical Machines with Glass/Mica Insulation Using Thermosetting Epoxy-silicone Binders". The Elektrosila Works has developed another type of mica-tape high-voltage insulation which was the subject of a report by Engineers V.N. Korolev and F.A. Kolenko. Accounts of the use of epoxy resins at the Elektrosila and Uralelektroapparat Works were read. Four reports on the impregnation of electrical machines were made by Z.I. Kholopova (KhEMZ), Engineer R.S. Kholodovskiy (GIEKI), Engineer I.G. Limov and Candidate of Technical Sciences V.V. Skipetrov (VEI) and by Engineer Z.L. Zusmanovskaya. S.V. Tsukernik (KhEMZ) reported on "The Insulation of Low-voltage Class F Machines" for which glyptal-oil-melamine varnish is most heat-resistant. Candidate of

Card2/4

110-58-6-22/22
A Conference on New Electrical Insulating Materials and Technological Processes

Technical Sciences L.T. Ponomareva (Works imeni Kalinin) reported on "Ekspanon Insulating Material", which is a transparent polymer obtained by heating synthetic rubber under appropriate conditions. A.A. Davydova (Armelektro Works) spoke on "The Use of Polyethylene Terephthalate Film for Slot Insulation of Electrical Machines". Three reports on micanite were given by Professor N.V. Aleksandrov and Engineer L.A. Epshteyn, by L.M. Bernshteyn and Engineer A.S. Ovcharova. The economics of electrical insulation was reviewed by F.Ya. Kazovskiy of the Elektrosila Works. A technical section, on the soldering of machine windings and on mechanization of winding and insulation work, met concurrently with the conference plenum. Experience with hard-soldering was discussed. Mechanization of winding and insulation work was reviewed by V.V. Solomchinskiy of the VNIITekhnologii elektricheskikh mashin, Khar'kov (All-Union Scientific Research Institute of the Technology of Electrical Machines, Khar'kov).

Card 3/4

110-58-6-22/22

A Conference on New Electrical Insulating Materials and
Technological Processes

The conference decided to set up an insulation section of
the Society, whereby the co-ordination of work on insulating
material should be improved.

ASSOCIATION: Filial NII zavoda "Elektrosila" (Branch of the
Scientific Research Institute of the Elektrosila Works)

SUBMITTED: February 21, 1958

1. Insulators (Electric)--Materials

Card 4/4

USCOMM-DC-55917

15 (2)

AUTHORS: Vargin, V. V., Aslanova, M. S.

SOV/72-59-12-16/19

TITLE: The Fifth International Congress on Glass

PERIODICAL: Steklo i keramika, 1959, Nr 12, pp 42-43 (USSR)

ABSTRACT: This Congress was held in Summer of 1959 in Munich. 600 delegates of 30 countries including USSR participated in it and dealt with the following problems in their reports: Control of quality of glass; investigation of melt- and finishing processes; mechanical properties and behavior of glass; corrosion of refractories and glass flows in glass melting furnaces; the physics and chemistry of glass; structure of glass; diathermancy of glass. Further reports of a Dutch delegate as well as of Americans are briefly mentioned. Professor A. A. Appen (USSR) reported on "Alumino-boron anomaly of some properties of silicate glasses". M. A. Bozborodov (USSR) dealt with "the method of recognizing cords and nonvitreous inclusions in glass". 17 reports on history, technology, design and use of glass were delivered at the Congress. Soviet delegates participated in discussions with delegates of the USA, the German Federal Republic and France concerning the

Card 1/2

The Fifth International Congress on Glass

SOV/72-59-12-16/19

resistance of glass and glass fiber and the properties of
glasses and enamels.

Card 2/2

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Amarov, K.P., V.V. Balandina, S.B. Greshanova, and V.A. Iyushechinskii. Structure and Properties of Iron-Containing Glasses	365
Vlasov, M.I., Ye.I. Galant, and A.A. Kefell. Absorption Spectrum of the Co^{2+} Ion as the Coordination Indicator of Boron and Aluminum in Silica Glasses	368
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Aslanova, M.B. Mechanical Properties of Glass Fibers	391
Ratobyl'skaya, V.A., and V.V. Tarasov. On Repolymerization of Inorganic Glasses and Mechanical Resistance	395
Rejzer, Kh. Determining the Density and Viscosity in Time for Formed Glass Class 16 III in the Transformation Range	399
Ponomarev, I.P. Importance of the Glass-Forming Phase in the Formation of the Ceramic Body and Current Classifier	405
Yermolayeva, Ye.V. Physicochemical Study of Fusion of Fire-Resistant Oxides	407
Prasolov, V.A. Structure of Glass and the Nature of Coloration in With Metals	412
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Card 17/22	

30617

S/058/61/000/008/024/044
AC58/A101

15-2125

AUTHOR: Aslanova, M. S.

TITLE: Mechanical properties of glass fibers

PERIODICAL: Referativnyy zhurnal, Fizika, no. 8, 1961, 198-199, abstract 8D73
(V sb. "Stekloobrazn. sostoyaniye". M.-L., AS USSR, 1960, 391-396.
Disc., 415-417)

TEXT: The role of surface defects in the mechanism of breakdown of glass fibers was investigated. It was established that regardless of the chemical composition of the glass, surface defects reduce its strength in damp air, in water, in aqueous solutions and in surface-active substances. Under these conditions incident to static loads there are observed fatigue effects that are caused by adsorption of water or surface-active substances. In fibers less than 3μ thick the effect of adsorption reduction in strength disappears. The highest values of strength are attained for wetting by nonpolar hydrocarbons. In silicate, alumoborosilicate and nonalkaline phosphate fibers an elastic aftereffect is detected. HF etching to a depth of $0.3 - 0.5\mu$ causes strengthening of the fiber, which is greatest for thin fibers. Heat treatment leads to a

Card 1/2

Mechanical properties of glass fibers

30617
S/058/61/000/008/024/044
A058/A101

sharp reduction in strength, causing crystallization of the glass; this crystallization can be detected by the electron diffraction method. HF etching restores strength. X

O. Molchanova

[Abstracter's note: Complete translation]

Card 2/2

84355

15.8300 2109,2209

S/191/60/000/008/007/014
B004/B056

AUTHOR: Aslanova, M. S.
TITLE: Adhesion of Polymers to Glass Fibers of Different Chemical Compositions
PERIODICAL: Plasticheskiye massy, 1960, No. 8, pp. 31-33

TEXT: The author investigated the adhesion of glyptal resin (GPR) and organosilicon lacquers of the type K-47 (K-47) (with polar groups) and type K-43 (K-43) (apolar) to glass fibers using the method of point contact (method of crossed filaments). It follows from Table 1 that the specific adhesion energy of polymer films does not depend upon the diameter of the fiber. The experimental data are collected in the following tables: X

Table 2. Alkali-free Glasses

Type of glass	Specific adhesion energy (erg/cm ²)		
	GPR	K-43	K-47
Quartz glass	305	158	297
Aluminoboron-lead glass	288	154	213

Card 1/3

Adhesion of Polymers to Glass Fibers of
Different Chemical Compositions

84355
S/131/60/000/008/007/014
BOC4/BO56

Aluminoboron-silicate glass	267	142	210
Aluminoboron-barium glass	254	132	200
Aluminoboron-zinc glass	245	135	216
Aluminoiron-silicate glass	230	-	181
Lead-silicate glass	50	85	-

Table 3. Non-silicate Glasses

Type of glass	Specific adhesion energy (erg/cm ²)	
	GPR	K-43
Phosphate glass	85	69
Borate glass	73	43
Cadmium-borate glass	63	42

Table 4. Sodium-calcium silicate glasses

Type of glass	Specific adhesion energy (erg/cm ²)		
	GPR	K-43	K-47
Sodium-calcium-silicate glass	145	109	129
Sodium-aluminum-magnesium-silicate glass	152	133	154
Sodium-lead-silicate glass	244	144	181

Card 2/3

Adhesion of Polymers to Glass Fibers of
Different Chemical Compositions

84355

S/191/60/000/008/007/014
BC04/B056

Sodium-zirconium-silicate glass	235	147	164
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In polyester resin No. 9 and apolar substances, such as polyisobutylene and paraffin, a very low adhesion energy was found. The adhesive properties of alkali-free aluminoborosilicate glasses not directly depend on the polarizability of ions contained in the glass. However, introduction of lead ions of a high polarizability into sodium-calcium-silicate glass considerably increases the specific adhesion energy of polar polymers to glass fibers (Table 4). In this case, the electrical conductivity of the glass surface decreases by two orders of magnitude. Similar hydrophobic properties are imparted to the glass by treatment with organochlorosilanes (Ref. 10) or volane. Thus, its adhesion energy increases by 30 to 50%. The adhesive properties of glass fibers increase with an increase of their mechanical and electrical properties. The author mentions B. V. Deryagin and P. A. Rebinder, and thanks M. A. Yakovleva for taking part in the experiments. There are 4 tables and 10 references: 5 Soviet, 2 US, 2 British, and 1 German.

Card 3/3

82672
S/072/60/000/009/002/007
E021/B058

15-2000

AUTHOR:

Aslanova, M. S., Doctor of Chemical Sciences

TITLE:

Inorganic Fibers of High-temperature Stability and Their Properties

PERIODICAL:

Steklo i keramika, 1960, No. 9, pp. 15-18

TEXT: Three types of such fibers with a melting temperature of from 1750° to 1800°C are used in modern technology. Quartz fiber (100% SiO₂) is produced by stretching a molten droplet. Cotton wool, mats, cardboard, paper, and filters can be manufactured from this fiber. "Silica fiber" (96-98% SiO₂) is produced by extracting the highly liquid oxides from commercial glass fibers. Fabrics, threads, felt, cardboard, paper, and filters are produced from sodium borosilicate- or aluminum borosilicate fibers treated with acid. Ceramic fibers of high-temperature stability made from kaolin are produced by melting naturally-occurring minerals and synthetic mixtures of difficultly fusible oxides, respectively, in electric furnaces at 2000°C. Felt, cardboard, paper, and filters may be produced from these fibers. The problem of producing kaolin fibers for

Card 1/2

15.2120

1409 only

84350

S/072/60/000/011/002/005
B021/B058

AUTHOR: Aslanova, M. S., Doctor of Chemical Sciences

TITLE: The Influence of Various Factors on the Mechanical Properties of Glass Fibers ✓

PERIODICAL: Steklo i keramika, 1960, No. 11, pp. 10 - 15

TEXT: In the present paper, the author mentions the research work hitherto conducted in this field and arrives at the conclusion that so far the nature of the increased strength of thin glass fibers is still the object of discussions. The molecular structure of glass fibers could not yet be determined on the basis of radiographic and electron diffraction analyses. The author also mentions the paper by A. F. Zak. In her opinion, the great strength of thin glass fibers is mainly caused by the reduction of size and number of surface defects, the development of which depends on the method and conditions of fiber production and the relative chemical composition. Drawing conditions and rate of cooling influence the strength of thin fibers, which is also determined by the condition of their surface and the physico-chemical interaction with their medium. The influence of

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24350

The Influence of Various Factors on the
Mechanical Properties of Glass Fibers

S/072/60/000/011/002/005
B021/B058

adsorption-active media on the mechanical properties of glass fibers is mentioned next. Such fibers, regardless of their chemical composition, have their strength reduced in humid air, water, and aqueous solutions of surface-active materials. The dependence of the adsorption effect on the fiber diameter can be seen from Fig. 1. The surface treatment of alkali-free fibers by means of organosilicon compounds influences their fatigue at static loads in water vapors (Fig. 2). The development of the glass-fiber deformation in water is shown in Fig. 3. The complete reversibility of deformation after relief was established, the conformity with the ideas held by Academician P. A. Rebinder being underlined. Electron diffraction patterns of glass fibers after heat treatment at 600° and 500°C are shown in Figs. 4 and 5. The influence of the chemical composition of glass on the strength of the glass fiber after heat treatment is shown in Fig. 6. The change of the tensile strength of fibers of alkali-free aluminum-boro-silicate glass after heat treatment and etching can be seen from Fig. 7. Ye. S. Lerman took part in these experiments. The tensile strength of quartz-glass fibers is shown in Fig. 8. In conclusion, the author states that the great strength of thin glass fibers can mainly be explained by the reduction of surface defects. The strength of glass fibers is mainly

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The Influence of Various Factors on the
Mechanical Properties of Glass Fibers

04350

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B021/B058

determined by the condition of their surface and their physico-chemical interaction with the medium. A drastic decline of the strength of thin glass fibers of various chemical composition after heat treatment is caused by their crystallization. The consolidation of fibers after etching by means of hydrofluoric acid proves the role played by surface defects and crystallization in the reduction of strength. There are 8 figures.

X

Card 3/3

KITAYGORODSKIY, I.I., doktor tekhn. nauk, prof.; KACHALOV, N.N., prof.;
VARGIN, V.V., doktor tekhn. nauk, prof.; YEVSTROP'YEV, K.S.,
doktor tekhn. nauk, prof.; GINZBURG, D.B., doktor tekhn. nauk,
prof.; ASLANOVA, M.S., doktor tekhn. nauk, prof.; GURFINKEL', I.Ye.,
inzh.; ZAK, A.P., kand. tekhn. nauk; KOTLYAR, A.Ye., inzh.; PAVLUSH-
KIN, N.M., doktor tekhn. nauk, prof.; SENYURIN, G.G., kand. tekhn.
nauk; SIL'VESTROVICH, S.I., kand. tekhn. nauk, dots.; SOLINOV, F.G.,
kand. tekhn. nauk; SOLOMIN, N.V., doktor tekhn. nauk, prof.; TEMKIN,
B.S., kand. tekhn. nauk; GLADYSHEVA, S.A., red. izd-va; TEMKINA, Ye.L.,
tekhn. red.

[Glass technology] Tekhnologiya stekla. Izd.3., perer. Moskva, Gos.
izd-vo lit-ry po stroit., arkh. i stroit. materialam, 1961. 622 p.
(MIRA 14:10)

1. Chlen-korrespondent AN SSSR (for Kachalov).
(Glass manufacture)

ASLANOVA, Margarita S.

"Structure and properties of glass fibers."

To be submitted for the Gordon Research Conference, Electrical and Relaxation Processes,
7-11 August 1961, Hilton, N.H.

Director, All-Union Scientific Research Institute of Glass Fiber.

G/005/61/000/012/002/003
D029/D109

AUTHOR: Aslanova, M.S.

TITLE: Influence of the surrounding medium on properties of glass fibers

PERIODICAL: Silikat Technik, no. 12, 1961, 528-531

TEXT: The author conducted experiments in order to determine the influence of chemical factors of the surrounding medium on the mechanical and electrical properties of glass fibers. The effect of concentrated acids, lyes and other aggressive agents destroys the fiber of alkali-free alumoborosilicate-glass and finally leads to a complete disintegration of the structural bonds of the glass. The author found out that adsorption processes further deformation and destruction of the glass fibers in a much higher degree than chemical processes. In his conclusions the author states that experiments showed that not only chemical reactions alter the physical-chemical properties of glass fibers, but that adsorption-active means also have a strong influence on the mechanical, electrical and adhesion properties of glass fibers. The hydrophobization of the fiber surface by help of various organic and silico-organic

Card 1/2

G/005/61/000/012/002/003
D029/D109

Influence of the surrounding medium...

substances improves the mechanical properties, the electric resistance and the adhesion of polymers to glass fibers. Through hydrophobization the alteration of glass fiber properties during the production and application can be restricted to a minimum. There are 5 figures, 2 tables and 5 Soviet-bloc references.

ASSOCIATION: Glass Fiber Institute, Moscow

Card 2/2

ZAK, Aron Faybyshevich; ASLANOVA, M.S., retsenzent; IVANOVA, A. I.,
retsenzent; DUKHOVNYI, F.K., red.; TRISHINA, L.A., tekhn.
red.

[Physicochemical properties of glass fibers] Fiziko-
khimicheskie svoistva steklianogo volokna. Moskva, Rostekh-
izdat, 1962. 224 p. (MIRA 15:11)
(Glass fibers)

PANASYUK, V.I.; ASLANOVA, M.S., doktor khim. nauk, prof., retsenzent;
TSOY, R.M., kand.tekhn.nauk, retsenzent; VAKSEMAN, E.Ya., inzh.,
retsenzent; PLEMYANNIKOV, M.N., red.; ZOLOTAREVA, I.Z., tekhn.
red.

[Chemical control of glass manufacture] Khimicheski kontrol'
proizvodstva stekla. Leningrad, Rastekhzdat, 1962. 195 p.
(MIRA 15:7)

(Glass manufacture---Chemistry)

ASLANOVA M.S.

Gordon conference on glass in the United States. Stek. i ker.
19 no.3:48 Mr '62. (MIRA 15:3)
(Glass manufacture--Congresses)

CHERNYAK, M.G., red.; ASLANOVA, M.S., red.; ZAK, A.F., red.;
IVANOVA, A.I., red.; KUTUKOV, S.S., red.; PANASYUK, V.I.,
red.; SHKOL'NIKOV, Ya.A., red.; VASKEVICH, D.N., red.;
SHPAK, Ye.G., tekhn.red.

[Methods for testing and quality control of fiber-glass materials]
Metody issledovaniia i kontroliia steklovoloknistykh materialov;
sbornik statei pod red. M.G. Cherniaka. Moskva, Goskhimizdat,
1963. 92 p. (MIRA 16:6)

1. Vsesoyuznyi nauchno-issledovatel'skii institut stekliannogo
volokna.

(Glass fiber industry--Testing)

ASLANOVA, M. S.; VOLSKAYA, S. Z.

"Strength and structure of fibres made of borate, cadmium and lead glasses."

report submitted for 4th All-Union Conf on Structure of Glass, Leningrad,
16-21 Mar 64.

ASLANOVA, M.S. doktor khim. nauk; BARTENIV, G.M., doktor khim. nauk

Congress on the physics of noncrystalline solids. Vest. AN SSSR
34 no.12:50-52 D '64 (MIRA 18:1)

ACCESSION NR: AP4039018

S/0072/64/000/005/0015/0017

AUTHOR: Myasnikov, A. A. (Engineer); Aslanova, M. S. (Doctor of chemical sciences)

TITLE: Influence of chemical composition of basalt on its resistance to acids

SOURCE: Steklo i keramika, no. 5, 1964, 15-17

TOPIC TAGS: basalt fiber, acid resistance, fiber glass, basalt composition

ABSTRACT: Considering the availability of local basalt formations in the Soviet Union and the high resistance to water and alkali of fiber glass spun from them, the main criterion of their general suitability is their resistance to dilute hydrochloric acid. Depending on the basalt composition, its fibers do not dissolve or are merely leached out in hydrochloric acid. The purpose of this work is to find the reasons for it in the composition of the material. For this purpose, experimental glass charges simulating variants of basalt composition were prepared and tested. The results were compared with fibers spun from natural basalt and it was found that basalt from the Kafanok quarry (Armenian SSR) forms fibers dissolving in HCl. Fibers from Isachkovsk diabase (Ukraine) are leached in hydrochloric acid and those from "Yanova Dolina" (Ukrainian SSR) are not attacked

Card 1/2

ACCESSION NR: AP4039018

by cold HCl. A diagram showing the influence of CaO/MgO and of Fe₂O₃ contents on the rate of leaching indicates that the latter increases with CaO/MgO content but decreases with growing Fe₂O₃ content (as substitute for CaO/MgO). It is assumed that the role of iron compounds in the vitreous structure changes depending on their quantity. Orig. art. has: 3 figures, no formulas, no tables.

ASSOCIATION: Ukrainskiy filial Vsesoyuznogo nauchno-issledova-tel'skogo institututa steklyannogo volokna (Ukrainian Branch, All-union Scientific Research Institute of Glass Fibers) Vsesoyuznyy nauchno-issledovatel'skiy institut steklyannogo volokna (All-union Scientific Research Institute of Glass Fibers)

SUBMITTED: 00

DATE ACQ: 10Jun64

ENCL: 00

SUB CODE: MT

NO REF SOV: 004

OTHER: 001

Cord 2/2

ASLANOVA, M.S., prof.

Glas fiber. Priroda 53 no.5:64-68 '64. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut steklyannogo volokna, Moskva.

L 14858-65 EWP(a)/EWT(m)/EPT(c)/EPR/EWP(b) Fq-h/Pr-h/Pe-h AFNL/LSD(a)-5/
SSD/ASD(m)-3/ESD(ga)/ESD(t) WH/WW
ACCESSION NR: AP4049142 S/0020/64/159/001/0186/0188

AUTHOR: Aslanova, M. S.; Yakovleva, M. A.

TITLE: Effect of the surface layer on mechanical and electrical characteristics of copper-containing glass fibers ⁶

SOURCE: AN SSSR. Doklady*, v. 159, no. 1, 1964, 186-188, and insert facing p. 161

TOPIC TAGS: glass fiber, aluminosilicate glass, alkali free glass, copper containing glass, glass heat treatment, semiconductor glass, high strength glass, glass surface property

ABSTRACT: New types of high-strength^b glass fibers have been synthesized in the $CuO-CaO-Al_2O_3-SiO_2$ system, and their mechanical and electrical properties have been determined. Copper oxide 15-40 mol% was introduced into the glass because of the known effect of highly polarized copper ions on the surface properties of glass. The new glass fibers have an increased modulus of elasticity in comparison with alkali-free aluminoborosilicate fibers and are moisture-resistant, but their surface resistivity has been found unstable. After heat

Card 1/3.

L 14858-65

ACCESSION NR: AP4049142

treatment at 500--600C in a hydrogen atmosphere, the modulus of elasticity of the fibers reached 12,600 kg/mm², the surface resistivity was stabilized at a high value, a positive thermal emf was developed in the surface layer, and chemical resistance was greatly improved. However, the strength of heat-treated fibers was decreased, especially after hf etching of the surface layer. The abnormal effect of etching is attributed to the disturbance in the close-packed structure of subsurface layers in the glass owing to the heat-treatment induced diffusion of copper ions to the surface. X-ray diffraction, microscopic, and etching studies indicated a crystalline structure of the surface layer of heat-treated fibers. Crystallization after heat treatment is responsible for the decrease in strength and increase in acid and alkali resistance of the fibers. Copper adsorbed in the surface layer contributes to the formation of crystallization centers. It was concluded that copper-containing heat-treated fibers combine a crystallized surface layer having p-type electronic conductivity with the bulk glassy phase having ionic conductivity. Orig. art. has: 3 figures.

Card 2/3

L 11858-65

ACCESSION NR: AP4049142

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut
steklyannogo volokna (All-Union Scientific Research Institute of
Glass Fibers)

SUBMITTED: 30May64

ENCL: 00

SUB CODE: MT, SS

NO REF SOV: 005

OTHER: 002

ATD PRESS: 3140

Card 3/3

CHERNYAK, M.G.; ASLANOVA, M.S.; VOL'SKAYA, S.Z.; KUTUKOV, S.S.;
SIMAKOV, D.P.; NAYDUS, G.G.; BOVKUNENKO, A.N.; KOVALEV, N.N.;
SHKOL'NIKOV, Ya.A.; ZHIVOV, L.G.; KOVALEV, N.P.; KOZHUKHOVA,
N.V.; KOROLEVA, A.Ye.; VINOGRADOVA, A.M.; OSIPOVA, O.M.;
BADALOVA, E.I.; BRONSHTEYN, Z.I.; L'VOV, B.S.; KRYUCHKOV,
N.N.; BLOKH, K.I.; MASHINSKAYA, N.I., red.

[Continuous filament glass fibers; technology fundamentals
and their properties] Nepreryvnoe stekliannoe volokno; osnovny
tekhnologii i svoistva. Moskva, Khimiya, 1965. 319 p.
(MIRA 18:8)

ASLANOVA, M.S., doktor khim. nauk

Seventh International Congress on Glass. Stek. i ker. 22
no.11:45-46 N '65. (MIRA 18:11)

L 42413-65 EWP(e)/EPA(s)-2/EWT(m)/EPF(c)/EWP(i)/EPF(n)-2/EPR/EPA(w)-2/EWP(j)/T/
EWP(b) Pc-4/Pab-10/Pq-4/Pr-7/Ps-4/Pt-7/Pu-4 WTI/RIA/WHI

ACCESSION NR: AP5008711 S/0072/66/000/003/0012/0015

AUTHOR: Myasnikov, A.A. (Engineer); Aslanova, M.S. (Doctor of chemical sciences)

TITLE: Selection of basalt rock compositions for the preparation of fibers having various applications

SOURCE: Steklo i keramika, no. 3, 1965, 12-15

TOPIC TAGS: glass manufacture, fiberglass manufacture, basalt fiber, iron oxide content, aluminum oxide content, fiberglass acid resistance, calcium oxide content, magnesium oxide content

ABSTRACT: To determine the influence of the content of iron and aluminum oxides on the acid resistance of basalt fibers, the authors studied the stability of such fibers in 3N hydrochloric acid. An increase in Al_2O_3 and a corresponding decrease in iron oxides decreases the acid resistance, and the boundaries of the soluble and stable fiber compositions are displaced toward lower contents of CaO and MgO and a higher SiO_2 content. Glass fibers of the system albite - anortite - diopside (whose phase diagram is illustrated), containing ferric oxide, are also divided into fibers which are soluble, leachable, and stable in acid. Experimental results show that an increase in the MgO instead of the CaO

Card 1/2

L 42413-65

ACCESSION NR: AP5008711

3

content increases the acid resistance of the fiber; absence of MgO makes the fiber soluble. Oxides of iron and magnesium increase the acid resistance more than do oxides of aluminum and calcium; this must be taken into account in selecting the raw materials for the production of basalt and other mineral fibers. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: [Myasnikov] Ukrainskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta steklyannogo volokna (Ukrainian Branch of the All-Union Scientific Research Institute of Fiberglass); [Aslanova] Vsesoyuznyy nauchno-issledovatel'skiy institut steklyannogo volokna (All-Union Scientific Research Institute of Fiberglass)

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

15

NO REF SOV: 006

OTHER: 000

Card 2/2

llc

L 4951-66 EWT(1)/EWT(e)/EPA(s)-2/EWT(m)/EWP(1)/EWP(b) IJP(e) G5V

ACC NR: AP5025717

SOURCE CODE: UR/0286/65/000/018/0070/0071

AUTHORS: Aslanova, M. S.; Syritskaya, Z. M.; Feykner, S. Ya.

178
33

ORG: none

TITLE: Glass. Class 32, No. 174779¹⁵ announced by State Scientific Research Institute of Glass (Gosudarstvennyy nauchno-issledovatel'skiy institut stekla)

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 70-71

TOPIC TAGS: glass, dielectric permeability, thermal stability, chemical stability

ABSTRACT: This Author Certificate presents a method for obtaining a glass of high thermal and chemical stability, high dielectric permeability, and low temperature of cooking. The components making up the glass are taken in the following proportions (in wt %): P₂O₅--30-40, TiO₂--51-60, SiO₂--1-6, and less than 2% of N₂O₅.

SUB CODE: MT/

SUBM DATE: 02Nov64

Card 1/1

UDC: 666.112.92:516.18

07011587

L 12110-66 EWP(e)/EWT(m)/EWP(b) WW/GS/WH

ACC NR: AT6000516 SOURCE CODE: UR/0000/65/000/000/0420/0431

AUTHOR: Aslanova, M. S.; Vol'skaya, S. Z.

ORG: none

TITLE: Strength and structure of borate, cadmium, and lead glass fibers

SOURCE: Vsesoyuznoye soveshchaniye po stekloobraznomu sostoyaniyu. 4th, Leningrad, 1964. Stekloobraznoye sostoyaniye (Vitreous state); trudy soveshchaniya, Leningrad, Izd-vo Nauka, 1965, 428-431

TOPIC TAGS: glass fiber, glass property, borate glass, silicate glass

ABSTRACT: In order to determine the relationship between the strength and structure of glass fibers, continuous fibers in the systems CdO-B₂O₃-Al₂O₃-SiO₂, B₂O₃-CaO-Al₂O₃-SiO₂ and PbO-CdO-B₂O₃-Al₂O₃-SiO₂ were studied. Glass fibers containing up to 45.5 mole % CdO and PbO with a low SiO₂ content (16.3 mole %, called cadmium and lead fibers) and fibers with a high boric anhydride content (70 mole %, called borate fibers) were prepared. Cadmium fibers were found to be stronger than lead ones, owing to the higher strength of the Cd-O bond. Borate fibers had a strength similar to that of lead ones. Fibers made of alkali-free aluminum borosilicate glass had the highest strength (300 - 320 kg/mm²), whereas cadmium, borate, and lead fibers showed values of no more than 200 - 250 kg/mm². The effects of surrounding moisture on the extension of fibers, of chemical composition on the deformation of fibers in

Card 1/2

15.44.55 4/2
B+1

L 12110-66

ACC NR: AT6000516

extension, of glass composition on the elastic modulus of fibers, and of thermal treatment on the strength of the fibers were investigated, and conclusions are drawn regarding their structural inhomogeneity. The microheterogeneity of lead, cadmium, borosilicate, soda-silica and glasses is also characteristic of their fibers, and manifests itself particularly after their thermal treatment at 100 - 500C. Orig. art. has: 4 figures and 1 table.

SUB CODE: 11 / SUBM DATE: 22May65 / ORIG REF: 001 / OTH REF: 002

Card

2/2

L 4578-66 ENP(e)/EPA(s)-2/EWT(m)/EPF(c)/EWP(1)/EWP(b) WW/JW/RM/WH

ACC NR: AP5027225

SOURCE CODE: UR/0020/65/164/006/1277/1279

AUTHOR: Aslanova, M. S.; Khazanov, V. Ye.

ORG: All-Union Scientific Research Institute of Glass Fiber (Vsesoyuznyy nauchno-issledovatel'skiy institut steklyannogo volokna)

TITLE: High-strength property of glass and quartz fibers at -196C (in liquid nitrogen)

SOURCE: AN SSSR. Doklady, v. 164, no. 6, 1965, 1277-1279

TOPIC TAGS: fiber glass, quartz, fiber optics

ABSTRACT: Alkali-free aluminoborosilicate glass fibers with diameters d = 4-20 μ and quartz fibers (d = 10 μ) were subjected to tensile strength tests in free air at room temperature and at -196C in a humidity-free environment in which adsorption had been eliminated. The strength of glass fibers at -196C, as compared with the strength at room temperature, was 1.5-2 times greater (400-450 kg/mm²). Maximum strength (800 kg/mm²) was observed for 4-10-μ fibers. The average strength of quartz fibers increased 2.5-3 times under the same test conditions, and the maximum strength also reached 800 kg/mm². The strength of quartz fibers may be increased four times by fast extrusion; a maximum strength of 1000 kg/mm² at -196C was recorded. Decreasing the length of the quartz fibers (from 10 to 5 mm) increases the maximum strength by 30 to 40%. Orig. art. has: 2 tables and 3 figures. [BD]

Card 1/2

09010824

L 1578-00

ACC NR: AP5027225

SUB CODE: MT/ SUBM DATE: 11Mar65/ ORIG REF: 005/ OTH REF: 003/ ATD PRENS:

4136

Card 2/2

DP

L: 32963-66 EWT(m)/EWP(i)/T/EWP(e) IJP(c) RM/WH/WW
ACC NR: AP6016927 SOURCE CODE: UR/0012/66/000/005/0017/0018

AUTHOR: Aslanova, M. S. (Doctor of chemical sciences); Rostomyan, R. M. (Engineer) 4/2
B

ORG: [Aslanova] All-Union Scientific Research Institute of Fiberglass and Fiberglass-Reinforced Plastics (Vsesoyuznyy nauchno-issledovatel'skiy institut stekloplastikov i steklovolokna); [Rostomyan] Institute of Stone and Silicates, Yerevan (Institut Kamnya i silikatov)

TITLE: Mechanical properties of new types of alkali glass fibers¹⁵ based on Armenian perlites

SOURCE: Steklo i keramika, no. 5, 1966, 17-18

TOPIC TAGS: glass fiber; alkali, perlite, mechanical property, chemical stability, synthetic fiber

ABSTRACT: The authors study Armenian perlites. These perlites contain very little iron oxide but do have both sodium and potassium oxides which contribute to the chemical stability of glass. A series of glass specimens was founded using various ratios of perlite sand and additives to find optimum composition. As a result of these experiments new types of glass fibers are produced with an aluminummagnesium calcium-sodium-silicate composition. The mechanical properties and chemical stability of these materials are similar to those of fibers made of alkali-free aluminoboro-

UDC: 666.189.212.017

Card 1/2

L 20633-66 EWT(m)/EWP(e) WH/WW

ACC NR: AP6011225

SOURCE CODE: UR/0413/66/000/006/0062/0062

INVENTOR: Aslanova, M. S.; Syritskaya, Z. M.; Feykners, S. Ya.

ORG: none

TITLE: Chemical- and heat-resistant glass. Class 32, No. 179885. [announced by All-Union Scientific Research Institute of Glass Fiber (Vsesoyuznyy nauchno-issledovatel'skiy institut steklyannogo volokna)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 62

TOPIC TAGS: chemically resistant glass, heat resistant glass, glass fiber

ABSTRACT: An Author Certificate has been issued for chemical- and heat-resistant glass for the manufacture of glass fibers resistant to aluminum phosphate binder. The glass has the following composition: P_2O_5 , 22-32%; TiO_2 , 64-88%; SiO_2 , 1-4%; Nb_2O_5 , not over 2%. In addition to these ingredients the glass contains: Cr_2O_3 , 1-4%; WO_3 , not over 1%. [B0]

SUB CODE: 11/ SUBM DATE: 19Feb65/ ATD PRESS: 4225

Card 1/1

UDC: 666.112.92:546.18'28'78'82'882

L 310h2-66 EWP(e)/EWT(m)/EWP(t)/ETI IJP(c) JD/JG/WB/GD/AT/WH
ACC NR: AT5027944 (N) SOURCE CODE: UR/0000/65/000/000/0087/0091

20
18
8-1

AUTHOR: Aslanova, M. S.

ORG: none

TITLE: Designing high-temperature corrosion-resistant materials on the basis of inorganic refractory fibers

SOURCE: Seminar po zharostoykim pokrytiyam. Leningrad, 1964. Zharastoykiye pokrytiya (Heat-resistant coatings); trudy seminarov. Leningrad, Izd-vo Nauka, 1965, 87-91

TOPIC TAGS: refractory oxide, fiberglass, zirconium compound, silicon compound, cesium compound, thorium compound, aluminum compound, corrosion resistance, high temperature material, synthetic fiber, refractory product

ABSTRACT: Large-scale experiments on the synthesis of inorganic fibers from pure refractory oxides showed that the long-fibered structures could be produced only from SiO₂ or on the basis of the binary systems ZrO₂ - SiO₂, HfO₂ - SiO₂, CeO₂ - SiO₂, ThO₂ - SiO₂ and Al₂O₃ - SiO₂. The tendency to form long-fibered structures in binary systems increased with increased content of SiO₂, and the longest fibers were produced from mixtures containing $\geq 30 - 40\%$ SiO₂. But the melting point of fibers and glasses decreased with an increased amount of SiO₂ regardless of the melting-point value of the refractory oxide. The author and his coworkers developed a technique for producing quartz, quartzoid, ZrO₂ - SiO₂, and aluminosilicate fibers of kaolin composition

Card 1/2

L 31042-66
ACC NR: AT5027944

2

having melting points of 1750 - 1800C. There is a production method for each type of fiber which affects only its mechanical properties. The thermal properties, chemical stability, and the electric properties of all these refractory fibers were nearly similar (although the quartz fibers had somewhat better quality) and did not depend on the production technique. Sintering (deformation in solid phase) without softening at 1450 - 1500C was typical of all fibers. These fibers are stable at temperatures $\leq 1200C$ during prolonged operation. They were proven to be very efficient heat insulators at a low volumetric weight ($50 - 1000 \text{ kg/m}^3$) with heat conductivity varying from 0.03 at room temperature to 0.15 kcal/m/hr/degree at 1000C. These fibers were chemically highly resistant to water, high-pressure steam, and all acids except HF and HPO_3 . Their electric resistivity at room temperature was $10^{16} - 10^{17}$ and it decreased with increased moisture only to 10^{12} ohm cm. These fibers were thus highly resistant to moisture, which is an important quality for electric insulators. The dielectric constant of fibers from quartz glass was 4.05 at a frequency of 10^6 cycles. The tensile strength of quartz fiber was $\sigma = 150$; fibers from molten kaolin had $\sigma = 140$; and the smallest $\sigma = 80 \text{ kg/mm}^2$ was observed in the quartzoid fibers. The treatment of quartz fibers by HF increased their σ to 280 - 300 kg/mm^2 . This suggested a large negative effect of the defective surface layer of the glass fibers on their mechanical strength.

SUB CODE: 11/ SUBM DATE: 20 Jul 65

Card 2/2 LC

L 35922-66 EWT(m)/EWP(e) WW/WH

ACC NR: AP6012132 (A) SOURCE CODE: UR/0413/66/000/007/0051/0051

INVENTOR: Aslanova, M. S.; Syritskaya, Z. M.; Feykners, S. Ya.;
Zak, A. F.; Khomutov, A. I. 35
4

ORG: none

TITLE: Glass. Class 32, No. 180317 ¹ /announced by All-Union Glass Fiber Research Institute (Vsesoyuznyy nauchno-issledovatel'skiy institut steklyannogo volokna)

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 7, 1966, 51.

TOPIC TAGS: glass, glass composition, GLASS FIBER, GLASS PROPERTY

ABSTRACT: An Author Certificate has been issued describing the composition of glass containing P₂O₅, SiO₂, TiO₂, Al₂O₃, MgO, which is intended for the manufacture of glass fiber. To produce a fiber with high absorption properties, the following wt. (%) of the above components are suggested: P₂O₅, 40.0-55.0; SiO₂, 32.0-43.0; TiO₂, 4.0-6.0; Al₂O₃, 3.0-8.0; MgO, >1.0; and CaO, 3.0-5.0. [LD]

/Translation of abstract/

SUB CODE: 11/ SUBM DATE: 12Feb65

Card 1/1 *lll*

L 04952-67 EWF(s)/EWI(m)/EWF(j) IJP(s) WW/RM/WH
ACC NR: AP602397 SOURCE CODE: UR/0374/66/000/003/0380/0382

AUTHOR: Aslanova, M. S.; Bolevich, I. S.; Tyukayev, V. N.; Gordon, S. S.

ORG: All-Union Scientific Research Institute of Fiber-Glass Reinforced Plastics and Glass Fiber, Kryukovo (Vsesoyuznyy nauchno-issledovatel'skiy institut stekloplastikov i steklyannogo volokna)

TITLE: Increasing the specific flexural rigidity of fiber-glass reinforced plastics by using hollow glass fibers

SOURCE: Mekhanika polimerov, no. 3, 1966, 380-382

TOPIC TAGS: glass fiber, reinforced plastic

ABSTRACT: An attempt was made to develop glass fiber of light structure, i. e., of hollow (capillary) tubular cross section. A special multi-drawplate unit was constructed, and the process of drawing hollow aluminoborosilicate glass fibers was studied. An experimental batch of braids made of these fibers, which had a capillarity coefficient $K = 0.6-0.7$ and an average outer diameter of 0.013 mm, was prepared. The physicomechanical properties of plastics reinforced with these hollow fibers in the direction of the filler were compared with those of plastics reinforced with ordinary solid glass fibers. The plastics with hollow fibers have lower elastic moduli and tensile strengths; however, because of the lower volume weight, their wall thickness is on the average 1.5 times greater, so that the flexural rigidity of such a wall is

Card 1/2

UDC: 678.01:666.212

ACC NR: AP7005415

SOURCE CODE: UR/0072/66/000/011/0012/0016

AUTHORS: Aslanova, M. S. (Doctor of chemical sciences); Gordon, S. S. (Engineer);
Khazanov, V. Ye. (Engineer)

ORG: All-Union Scientific Research Institute for Fiber Glass and Glass Fibers
(Vsesoyuznyy nauchno-issledovatel'skiy institut stekloplastikov i steklyannogo
volokna)

TITLE: Application of experimental-statistical optimization methods to the
determination of the dependence of the diameter of glass fibers on their method
of production

SOURCE: Steklo i keramika, no. 11, 1966, 12-16

TOPIC TAGS: glass, glass fiber, glass wool, glass product, mathematic analysis,
PRODUCTION ENGINEERING

ABSTRACT: A mathematical description of the glass fiber formation process is
presented. This description is based on the experimental statistical optimization
methods described by V. V. Nalimov and N. A. Chernova (Statisticheskkiye metody
planirovaniya ekstremal'nykh eksperimentov. M., izd. Nauka, 1965). The following
relationship between the glass fiber diameter d and the normalized parameters X_3 and
 X_5 was derived:

$$7,81 - d = \frac{(X_3 - 0,395)^2}{2,44} + \frac{(X_5 + 0,875)^2}{2,04}$$

Card 1/2

UDC: 661.189.211

ACC NR: AP7005415

A table of matrices used for the evaluation of the dependence of the decrement in the mass of glass on the variable parameters is presented. It is concluded that the experimental-statistical optimization method may also be successfully applied to the solution of multicomponent silicate systems. Orig. art. has: 1 table, 1 graph, and 8 equations.

SUB CODE: 11/

SUBM DATE: none/

ORIG REF: 006

Card 2/2

NAGIYEV, M.F.; TRYAPINA, L.I.; ASLANOVA, N.F.

Determination of the kinetic characteristics of thermally cracked
fuel oils. Azerb.khim.zhur. no.5:57-63 '60. (MIRA 14:8)
(Petroleum as fuel)

MIKHAYLOV, V.V.; ASLANOVA, N.K.

Mechanism of disorders of the concentration and clearance capacity
of the kidneys in botulism and diphtheria. Pat. fiziol. i eksp.
terap. 9 no.4:43-47 J1-Ag '65. (MIRA 18:9)

1. Kafedra patologicheskoy fiziologii (zav. - prof. V.V.Mikhaylov)
Saratovskogo meditsinskogo instituta.

ASLANOVA, N. Ya

21337 ASLANOVA, N. Ya Novye knizhnye kharaktery i dolzhi v zone Starykh novostov v Kazakhstane, prelozheniya. Svyaz Kazan'-vo, 1998, No. 7, s. 3-7

30: Letopis' zhurnalnykh statey, No. 22, Moskva, 1998.

ASLAW VII, 1955
ASLAWA, N. YE.

34090. Zimnyaya razvedka chernomorskikh pelagicheskikh ryb. ryb khos-vo,
1949, No. 11, c. 26-32

30: Knizhuaya, Letopis', Vol. 7, 1955

ASIANOVA, N.Ye.; BOGOROV, V.G.; ZUSSER, S.G.; KLENOVA, M.V.; STAROSTIN, A.D.

Scientific and technical research of I.I. Mesiatsev. Trudy
Gidrobiol.ob-va no.6:17-22 '55. (MIRA 8:9)
(Mesiatsev, Ivan Illarionovich, 1885-1940)

ASLANOVA, N.Ye., kand.biol.nauk

Study of fish behavior within the zone of action of the fishing
gear. Trudy VNIRO 36:33-51 '58. (MIRA 12:4)
(Fishing)

ASLANOVA, N.Ye.

Studying the reaction of fishes to the net. Trudy VNIRO
44:165-176 '61. (MIRA 14:11)

(Fishes--Behavior)
(Fishing nets)

ASLANOVA, N.Ye.

Tagging of commercial fishes. Vop. ikht. 1 no.3:564-569
'61. (MIRA 14:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo
rybnogo khozyaystva i okeanografii - VNIRO, Moskva.
(Fish tagging)

ASLANOVA, S.M.

Some data about fossil fish of the Shemakha region. Izv. AN Azerb. SSR.
Ser. geol.-geog. nauk no. 5:77-83 '60. (MIRA 14:5)
(Shemakha region—Fishes, Fossil)

ASLANOVA, S.M.

New finds of upper Maikop Cetacea in the vicinity of Perikishkyul'.
Izv.AN Azerb.SSR. Ser.geol.-geog.nauk i nefi no.3:25-29 '61.
(MIRA 15:1)

(Sumgait Valley--Cetacea, Fossil)

ASLANOVA, S.M.

Seal from Lower Miocene sediments in Azerbaijan. Dokl. AN Azerb.
SSR 21 no.6:46-48 '65. (MIRA 18:12)

1. Yestestvenno-istoricheskiy muzey imeni Zardabi.

ASLANYAN, A.

Activists find production potentials. Sov. profsoiuzy 19
no.14:19-21 J1 '63. (MIRA 16:9)

1. Predsedatel' Armyanskogo respublikanskogo komiteta professional'nogo
soyuza rabochikh neftyanoy i khimicheskoy promyshlennosti.
(Armonia--Chemical industries--Technological innovations)

ASLANYAN, A.; AKOPYAN, M.

Urgent promotion of industrial training of specialists.
Prom. Arm. 6 no.11:21-22 N '63. (MIRA 17:1)

ASLANYAN, A.A. (Dnepropetrovsk, pr. Kalinina, d.42, kv.12)

Mask to facilitate strumectomy. Klin.khir. no.12:72 D '62.
(MIRA 16:2)

1. Khirurgicheskoye otdeleniye (zav. - A.A. Aslanyan) meditsinskoy
sanitarnoy chasti zavoda Azovkabel' g. Berdyanska, Zaporozhskoy
oblasti.

(SURGICAL INSTRUMENTS AND APPARATUS) (GOITER)

ASLANYAN, A. F.

"Dependence Between Coefficient of Filtration and Height of Capillary Rise of Ground Soils."
Iz Akad Nauk Armen SSR, No 10, 1946 (61-64).
(Meteorologiya i Gidrologiya, No 6 Nov/Dec 1947)

SO: U-3218, 3 Apr 1953

ASLANYAN, A.A. (Zaporozhskaya oblast', Berdyansk, pr. Stalina, d.22/1, kv.29)

Treating second and third degree burns with synthomycin and levomycetin powder. Nov. khir. arkh. no.5:101-102 S-0 '60. (MIRA 14:12)

1. Khirurgicheskoye otdeleniye medsanohasti zavoda "Azovkabel'" Berdyanska, Zaporozhskoy oblasti.
(BURNS AND SCALDS) (CHLOROMYCETIN)

ASLANYAN, A.A. (Berdiansk, Zaporozhskoy obl., prosp.Staliha, d.22/1,kv.29)

Acute obstruction owing to primary cancer of the small intestine.
Nov. khir. arkh. no.3:89 MyeJe '60. (MIRA 15:2)

1. Khirurgicheskoye otdeleniye medsanchasti zavoda "Azovkabel"
goroda Berdyanska, Zaporozhskoy oblasti.
(INTESTINES...CANCER) (INTESTINES...OBSTRUCTIONS)

ASLANYAN, A.A.

Drum with 4 sections. Nov.khir.arkh. no.1:84 '62. (MIRA 15:8)

1. Khirurgicheskoye otdeleniye mediko-sanitarnoy chasti zavoda
"Azovkabel'" g. Berdyanska, Zaporozhskoy oblasti.
(BANDAGES AND BANDAGING)

AZIZBEKOV, Sh.A.; AMIRASLANOV, A.A.; ASLANYAN, A.G.; MUSTAFABEYLI,
M.A.; SINANYAN, G.A.; TVALCHRELIDZE, G.A.; TSOY, V.;
KITAYENKO, L.G., red. izd-va; SHMAKOVA, T.M., tekhn. red.

[Geology of lead and zinc deposits in the Caucasus and their
distribution features] Geologia svintsovotsinkovykh mesto-
rozhdenii Kavkaza i zakonomernosti ikh razmeshchenia. Otvet.
red. A.A.Amiraslanov. Moskva, Gosgeoltekhizdat, 1962. 165 p.
(MIRA 15:7)

(Caucasus--Lead ores)
(Caucasus--Zinc ores)

ASLANYAN, A.G.

On the accuracy of a solution proposed by Carleman. Dif. urav. 1
no.10:1411-1412 0 '65. (MIRA 18:10)

1. Moskovskiy fiziko-tekhnicheskoy institut.

SANAMYAN, V. A.; ASLANYAN, A. M.

Variation of the flux density of the radio source Cassiopeia-A.
Soob. Biur. obser. no.30:35-43 '62. (MIRA 15:10)

(Radio astronomy)

TOVMASYAN, G.M.; SANAMYAN, V.A.; ASLANYAN, A.M.

New data on radio emission from the spur-shaped region near
 $\ell'' = 30^\circ$. Soob. Biur. obser. no.31:53-56 '62. (MIRA 16:9)

1. Institut radiofiziki i elektroniki AN Armyanskoy SSR.

SANAMYAN, V.A.; ASLANYAN, A.M.

Variation of the radio emission flux from Cassiopeia A.
Astrofizika 1 no.2:247-250 Je '65. (MIRA 18:10)

1. Byurakanskaya astrofizicheskaya observatoriya.

ASIANYAN, A.T.

Origin of Lake Sevan. Izv.AN Arm.SSR.Est.nauki no.8:39-44 '47.
(MLRA 9:8)

1. Institut geologicheskikh nauk AN Armyanskoy SSR.
(Sevan, Lake)

ASLANYAN, A.T.

Age and origin of metamorphic shales in the northern slope of the
Miaporskiy (Murguskiy) Range. Izv.AN Arm.SSR,Est.nauki no.8:
69-73 '47. (MERA 9:8)

1. Institut geologicheskoy nauk AN Argyanskoy SSR.
(Miaporskiy Range--Shale)

ASLANYAN, A.T.

~~Two formulas for determining the thickness and depth of a stratum.~~
Izv.AN Arm.SSR.Ser.FMET nauk 1 no.1:81-84 '48. (MLRA 9:8)

1. institut geologicheskikh nauk Akademii nauk Armyanskoy SSR.
(Engineering geology)

ASLANYAN, A. T.

PK76T51

USSR/Geology

Jun 1948

Stratification
Tectonics

"New Data on the Stratigraphy of the Jurassic Deposits of Northern Armenia," A. T. Aslanyan, Inst of Geol Sci, Acad Sci Armenian SSR, 4 pp

"Dok Ak Nauk SSSR" Vol LX, No 7

From his studies of Mesozoic deposits of northern regions of Armenia, author has developed detailed stratigraphic pattern for rocks of Jurassic system. Submitted Mar 1948.

76T51

ASLANYAN, A. T.

30184

O vozrastye effuzivnykh Kvartsyevykh porfirov malogo kavkaza.
ixvyestikh akad. nauk SSSR, syerikh gyeol., 1949 No. 5, C. 141-144--
Bibliogr: 13 nazv.

SO: LETOPIS' NO. 34

USSR/Geology - Stratification
Petrography

Nov/Dec 49

"The Age of the Volcanogenic Stratum of the Central Part of the Little Caucasus," A. T. Aslanyan, 10 pp

"Iz Ak Nauk SSSR, Ser Geol" No 6

PA 152743
On the basis of personal studies and a critical survey of literary data, Aslanyan proves the young volcanogenic-clastic strata of central part of the Little Caucasus and Eypsiiferous, salt-bearing strata of southwestern part of this region are stratigraphically equivalent and belong to the Sarmatian Age, while the blanket deposit of doleritic basalts

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USSR/Geology - Stratification (Contd) Nov/Dec 49

of the Armenian plateau is separated from this volcanogenic stratum into an independent stratigraphic level and belongs to the Akchagylskian Age.

152743

ASLANYAN, A. T.

ASLANYAN, A.T.

History of the origin of the Ararat Hollow. Dokl. AN Arm.SSR, 11
no.1:29-34 '49. : (MLRA 9:10)

1. Institut'geologicheskikh nauk Akademii nauk Armyanskoy SSR,
Yerevan. Predstavleno I.G. Magak'yanom.
(Ararat region--Geology, Structural)

ASLANYAN, A.T.

Mechanism of geosynclinal folds. Izv. AN Arm. SSR. Ser. FMT nauk 5
no.4:7-16 '52. (MLRA 9:8)

1. Institut geologicheskikh nauk AN Armyanskoy SSR.
(Folds (Geology))

ASLANYAN, A.T.; BAL'YAN, S.P.

Traces of Lower Quaternary glaciation in Armenia. *Biul. MOIP, Otd.*
geol. 28 no.6:73-74 '53. (MLRA 6:12)
(Armenia--Glacial epoch) (Glacial epoch--Armenia)

ASLANYAN, A. T.

"Relation Between Volcanic Activity and Deformations of the Terrestrial Core".
Dokl. AN Arm SSR, No 1, pp 19-25, 1954.

Volcanic activity is related to periods of elastic undulatory deformations of the terrestrial core, according to the assumption of geotectonic contractions. The rise of magma is due to pressure of the core and expansion of gases. Gravitational anomalies should be observed in the zones of volcanic activity. (RZhFiz, No 11, 1955)

SO: Sum No 884, 9 Apr 1956